

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1-32. (canceled)

33. (new) A thermostat system comprising:  
a processor having a user interface; and  
a program, in the processor, having an at least one configuration for an air management system, the at least one configuration comprising:  
an air management system identification;  
a listing of zones for the air management system;  
parameter settings for each zone;  
schedules of the parameter settings;  
a modulated control for a plurality of heating stages for at least one zone;  
and  
a modulated control for a plurality of cooling stages for at least one zone.

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

34. (new) The system of claim 33, further comprising:  
a plurality of programmable thermostats; and  
wherein the processor may download the program having  
at least one configuration to each thermostat of  
the plurality of thermostats.
35. (new) The system of claim 34, wherein the at least one  
configuration further comprises a modulated control for a  
simultaneous operation of a heating device and a cooling  
device.
36. (new) The system of claim 35, wherein the simultaneous  
heating device and the cooling device is for affecting  
humidity.
37. (new) The system of claim 36, wherein the at least one  
configuration comprises a modulated control for an air  
mover.

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

38. (new) The system of claim 37, wherein the modulated controls comprise PID (proportional, integral and derivative) control loop tuning.

39. (new) The system of claim 38, wherein the parameters are selected from a group consisting of temperatures, humidity, sensor selection, volume of air movement, the percentage of added fresh air, modes of occupied, unoccupied or standby of certain spaces for at least one zone.

40. (new) The system of claim 38, wherein the at least one configuration further comprises a selectable non-modulated control for the pluralities of the heating and cooling stages and for the air mover.

41. (new) The system of claim 40, wherein the processor is a portable configuring device.

42. (new) The system of claim 41, wherein the processor has a capability comprising:

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

uploading a configuration from a thermostat of the plurality of thermostats;  
modifying the configuration; and  
downloading the configuration to the thermostat.

43. (new) The system of claim 42, wherein the processor may download the configuration to several thermostats of the plurality of thermostats.

44. (new) The system of claim 41, wherein:  
the processor may upload a configuration from a thermostat of the plurality of thermostats;  
the configuration may be diagnosed for possible problems;  
the configuration may be modified to remove the possible problems; and  
the configuration may be downloaded to the thermostat of the plurality of thermostats.

45. (new) The system of claim 41, wherein the processor is a personal digital assistant.

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

46. (new) The system of claim 45, the personal digital assistant is selected from group of devices consisting of a Palm™ and the like

47. (new) A thermostat system comprising:  
a configuring device; and  
a plurality of thermostats for air management systems,  
respectively; and

wherein:

the configuring device may upload, store, modify  
and download one or more configurations of  
the plurality of thermostats;

each configuration may be modified by changing:  
parameter settings;  
schedules of parameter settings; and  
modulated controls for heating stages  
and cooling stages.

48. (new) The system of claim 47, wherein each air management system may have a plurality of zones.

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

49. (new) The system of claim 48, wherein the configuring device has various configurations that may be downloaded to the thermostats of the air management systems at different locations.

50. (new) The system of claim 49, wherein the configuring device is a commercially available computer.

51. (new) The system of claim 50, wherein the configuring device is a personal digital assistant.

52. (new) The system of claim 51, the personal digital assistant is selected from group of devices consisting of a Palm™ and the like.

53. (new) A thermostat system comprising:  
a plurality of thermostats; and  
wherein each thermostat of the plurality of thermostats comprises at least one configuration

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

for an air management system, the at least one configuration comprising:

an air management system identification;

a listing of zones for the air management system;

parameter settings for each zone;

schedules of the parameter settings;

modulated controls for a plurality of

heating stages for at least one zone;

and

modulated controls for a plurality of

cooling stages for at least one zone.

54. (new) The system of claim 53, wherein the plurality of thermostats is connected to a communications bus.

55. (new) The system of claim 54, further comprising a sequencing system controller connected to the communications bus, for controlling and staging the plurality of thermostats.

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

56. (new) The system of claim 55, wherein the at least one configuration further comprises a modulated control for a simultaneous operation of a heating device and a cooling device.

57. (new) The system of claim 56, wherein the simultaneous heating device and the cooling device is for affecting humidity.

58. (new) The system of claim 57, wherein the at least one configuration comprises a modulated control for an air mover.

59. (new) The system of claim 58, wherein the modulated controls comprise PID (proportional, integral and derivative) control loop tuning.

60. (new) The system of claim 58, wherein the parameters are selected from a group consisting of temperatures, humidity, sensor selection, volume of air movement, the percentage of added fresh air, modes of occupied,

Application Serial No. 10/643,376  
Amendment dated August 27, 2004  
Reply to office action dated May 27, 2004

unoccupied or standby of certain spaces for at least one zone.

61. (new) The system of claim 58, wherein the at least one configuration further comprises a selectable non-modulated control for the pluralities of the heating and cooling stages and for the air mover.

62. (new) The system of claim 61, further comprising:  
a configuring device; and  
wherein:  
the configuring device may communicate with system sequencing controller; and  
the configuring device may upload, store, modify and download one or more configurations of the system sequencing controller and at least one configuration of the plurality of thermostats.

63. (new) The system of claim 61, wherein the configuring device is a personal digital assistant.